

Prevention of Poliomyelitis

THE following suggestions are the result of a meeting of the Advisory Committee to the Department of Public Health on acute anterior poliomyelitis at the San Francisco Hospital on September 8, 1937 (J. C. Geiger, M.D., Director of Public Health, City and County of San Francisco):

The recent widespread publicity given to the use of zinc sulphate spray in recent outbreaks of poliomyelitis (infantile paralysis) throughout the country has caused considerable interest locally among parents, who, looking forward to a possible increased incidence of the disease on the Pacific Coast, naturally desire to avail themselves of any aid in preventing it. Dr. Schultz, of Stanford University, by extensive experimental work, has demonstrated that 1 per cent solution of zinc sulphate, 1 per cent pontocaine, and $\frac{1}{2}$ per cent sodium chloride in distilled water is the best chemical spray, experimentally on monkeys.

There is definite evidence that such preparations, when properly applied, will afford a remarkable degree of protection to *monkeys*. Whether this will follow in the case of the human being has yet to be determined. The use of this method must be strictly limited until the proper technic has been worked out, as the method of application is definitely unsettled at present.

Attention is called to the possible side action of the local anesthetic, and the physician giving the treatment should be on the lookout for symptoms of poisoning. Attention is further

called to the hazards of using a long-tipped atomizer in the vicinity of the cribriform plate. This method also is impracticable in the cases of small children, for whom the instillation of the solution in the Proetz position is advocated. It is particularly pointed out that any attempts at home medication are absolutely valueless.

It may be deemed advisable to make a preliminary application of a substance such as ephedrin to shrink the mucous membranes before applying the zinc solution. The local anesthetic and the shrinking agent could be used together. The injections should be given once every 2 or 3 weeks, as determined by a returning sense of smell. No change in the constituents of the solution should be made without investigation as to the experimental result on monkeys.

It is recommended that the use of this solution be optional with the family of actual contacts to the disease. The treatments shall be conducted in centers to be determined at a future date. These centers will be under adequate supervision, and any physician who wishes to learn the technic can attend and be instructed by a proficient specialist. A record of all treatments given in these centers shall be kept and, in addition, there shall be a follow-up of the patients receiving the treatment. Zinc sulphate spray, if used at all, must be under the direction of a competent physician, with the understanding that it is used on an experimental basis only.